TREE BORNE OIL SEEDS

INDUSTRIAL WOOD RESEARCH DIVISION-

LABORATORY

MUKKOMBU, TRICHY

TREE BORNE OIL SEEDS

Oil an economically important product, is obtained from seeds, leaves, wood of various plants. In this laboratory oil is extracted by means of solvent extraction / steam distillation. On the basis of oil in seeds/leaves/wood etc., the plants are classified and from the best, multiplication of the plants is done.

To identify the better trees on the basis of oil percentage this laboratory is being utilized by the Research Wing. Previously the oil was estimated by SOXHLET extraction method a time consuming one. After the improvement of this Industrial Wood Research Division, Laboratory now the laboratory is provided with 'SOXHRAP' instrument, which can help to estimate oil from 5-6 samples at a time.

This book let is the brainchild of the Deputy Conservator of Forests and all the basic details required by Forester, Farmers and Students are furnished here for ready reference.

Abrus precatorious

Wt/ Seed	:	0.1287g
Oil % with Respect to seed	:	4.21
Endosperm	:	5.93
Colour	:	Bright yellow

Acacia auriculiformis

Wt/ Seed	:	0.0225g
Oil % with Respect to seed	:	4.75
Colour	:	Bright yellow

Acacia ferruginea

Wt/ Seed	:	0.1539g
Oil % with Respect to seed	:	6.88
Colour	:	Yellow

Acacia leucophloea

Wt/ Seed	:	0.02416g
Oil % with Respect to seed	:	4.14
Colour	:	Brownish yellow

Acacia mangium

Wt/ Seed	:	0.1579g
Oil % with Respect to seed	:	9.87
Colour	:	Blackish yellow

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Acacia nilotica

Wt/ Seed	:	0.1579g
Oil % with Respect to seed	:	9.87
Colour	:	Blackish yellow

Albizzia amara

Wt/ Seed	:	0.7966g
Oil % with Respect to seed	:	4.17
Colour	:	Reddish Yellow

Albizzia lebbeck

Wt/ Seed	:	0.1030g
Oil % with Respect to seed	:	5.63
Colour	:	Greenish yellow

Albizzia richardiana

Wt/ Seed	:	0.8794g
Oil % with Respect to seed	:	5.315
Endosperm	:	7.974
Colour	:	Pale yellow

Anacardium occidentale

Wt/ Seed	:	7.070g
Oil % with Respect to seed	:	13.42
Endosperm	:	42.118
Colour of oil	:	Yellow

Anona squamosa

Wt/ Seed	:	0.1854
Oil % with		
Respect to seed	:	15.7
Colour of oil	:	Brown

Anogeissus latifolia

Wt/ Seed	:	0.005838g
Oil % with		
Respect to seed	:	6.3
Colour of oil	:	Pale yellow

Argemone mexicana

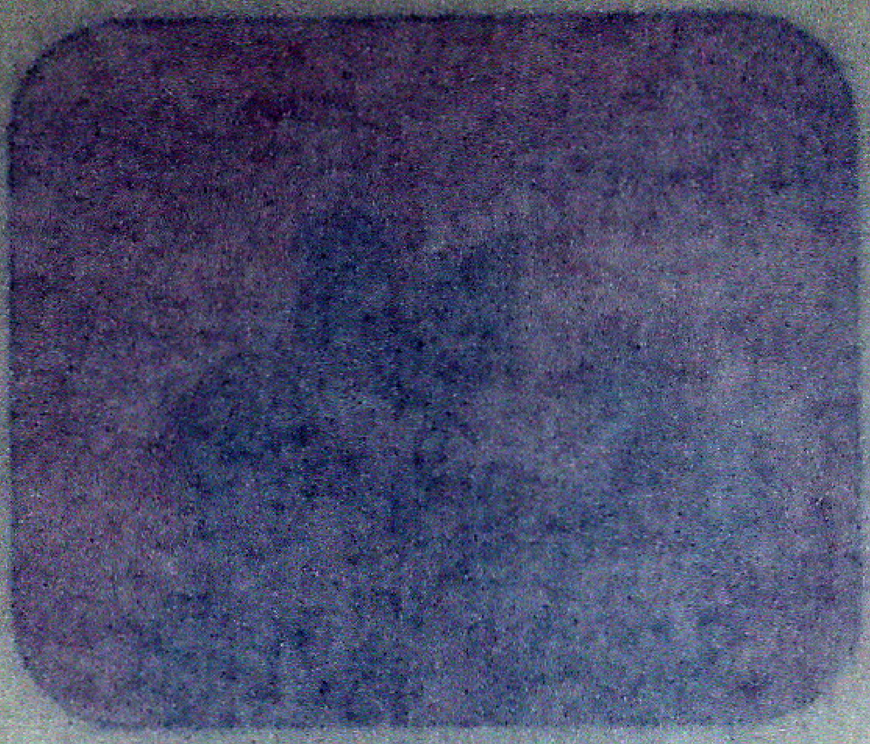
Wt/ Seed	:	0.0018g
Oil % with		
Respect to seed	:	27.07
Colour of oil	:	Blackish yellow

Artocarpus heterophyllus

Wt/ Seed	:	7.402g
Oil % with		
Respect to seed	:	0.445
Colour of oil	:	Light yellow

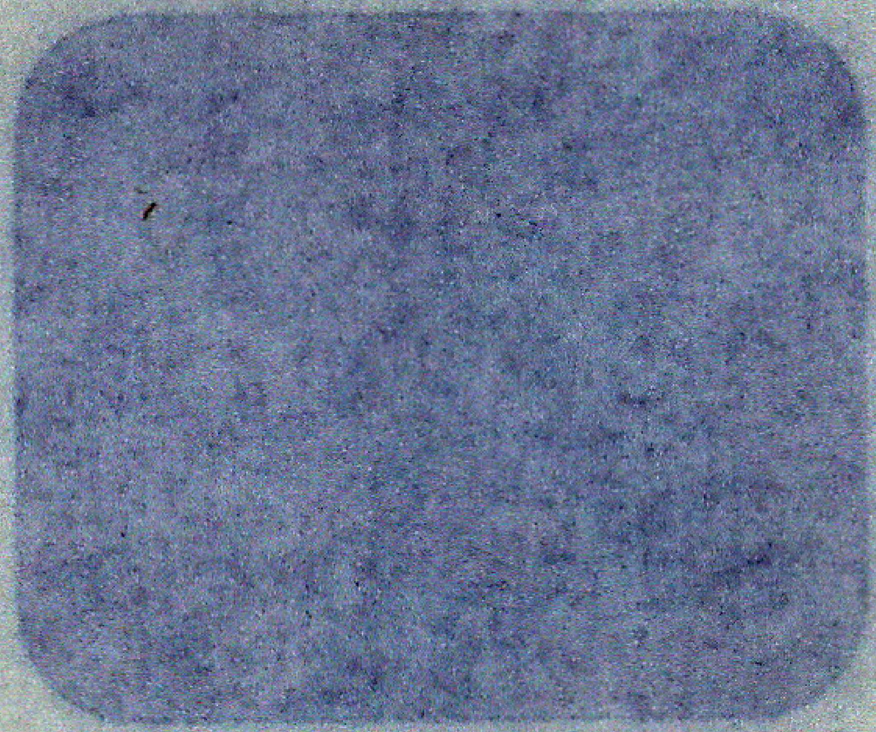
Azadirachta indica

Wt/ Seed	:	0.1696g
Oil % with		
Respect to seed	:	18.8
Endosperm	:	34.8
Colour of oil	:	Bright yellow



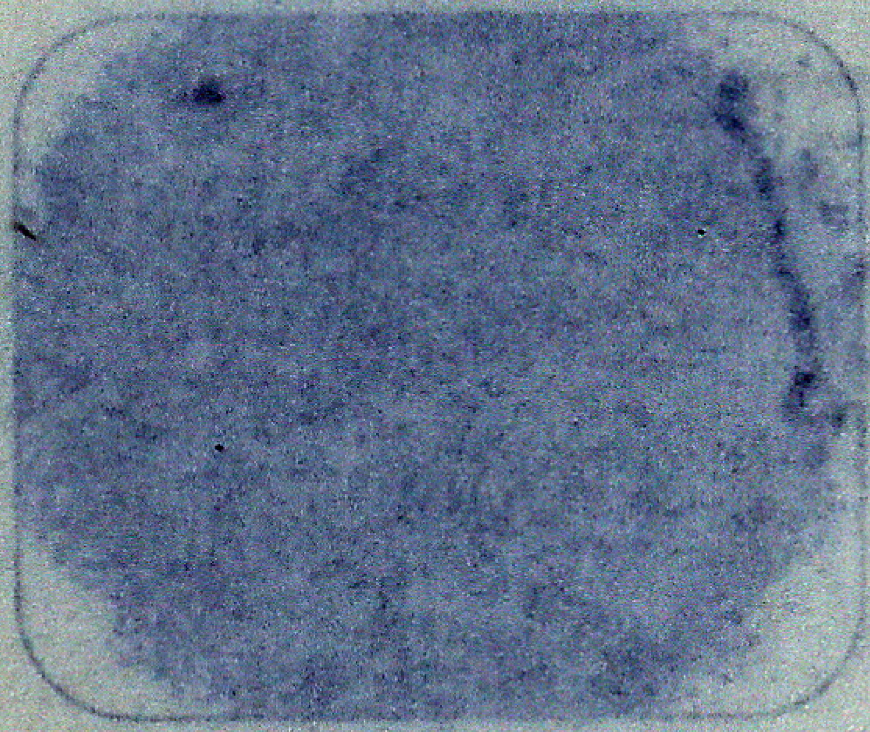
Anona squamosa

Wt/ Seed	:	0.1854
Oil % with Respect to seed	:	15.7
Colour of oil	:	Brown



Anogeissus latifolia

Wt/ Seed	:	0.005838g
Oil % with Respect to seed	:	6.3
Colour of oil	:	Pale yellow



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Azadirachta indica

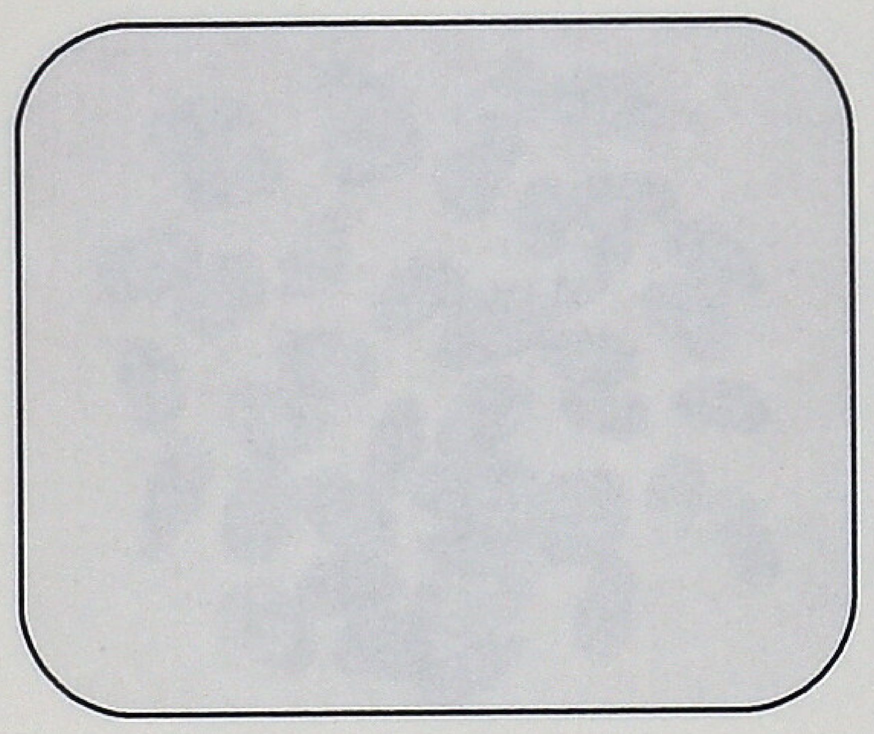
Wt/ Seed	:	0.1696g
Oil % with Respect to seed	:	18.8
Endosperm	:	34.8
Colour of oil	:	Bright yellow

Bassia latifolia

Wt/ Seed	:	3.2516g
Oil % with		
Respect to seed	:	35.1
Endosperm	:	44.2
Colour of oil	:	yellow

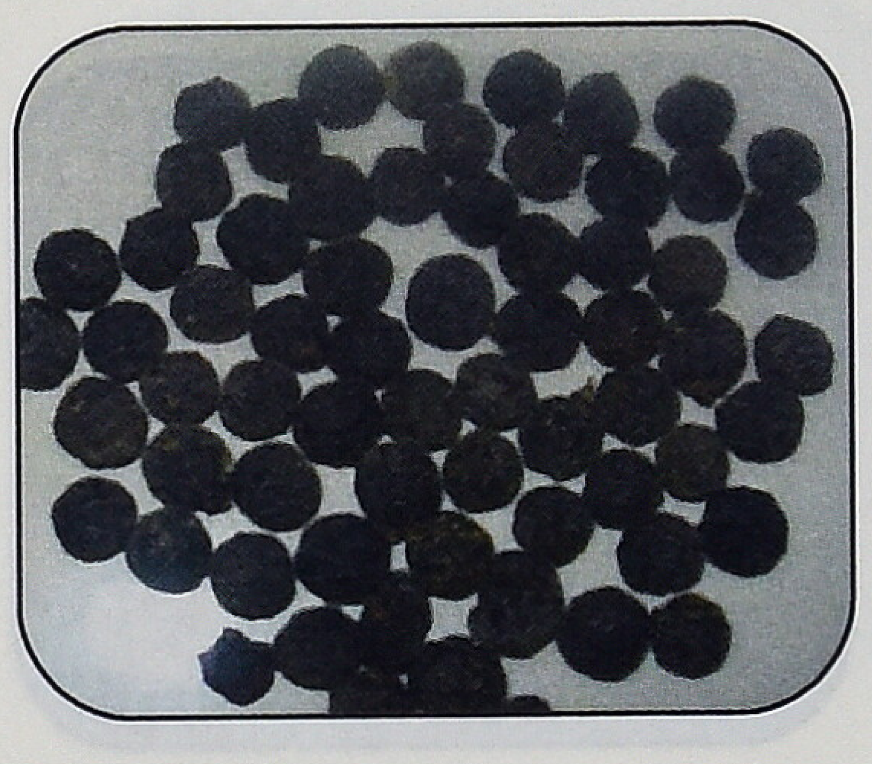
Bauhinia variegata

Wt/ Seed	:	0.1101g
Oil % with		
Respect to seed	:	2.8
Colour of oil	:	Green



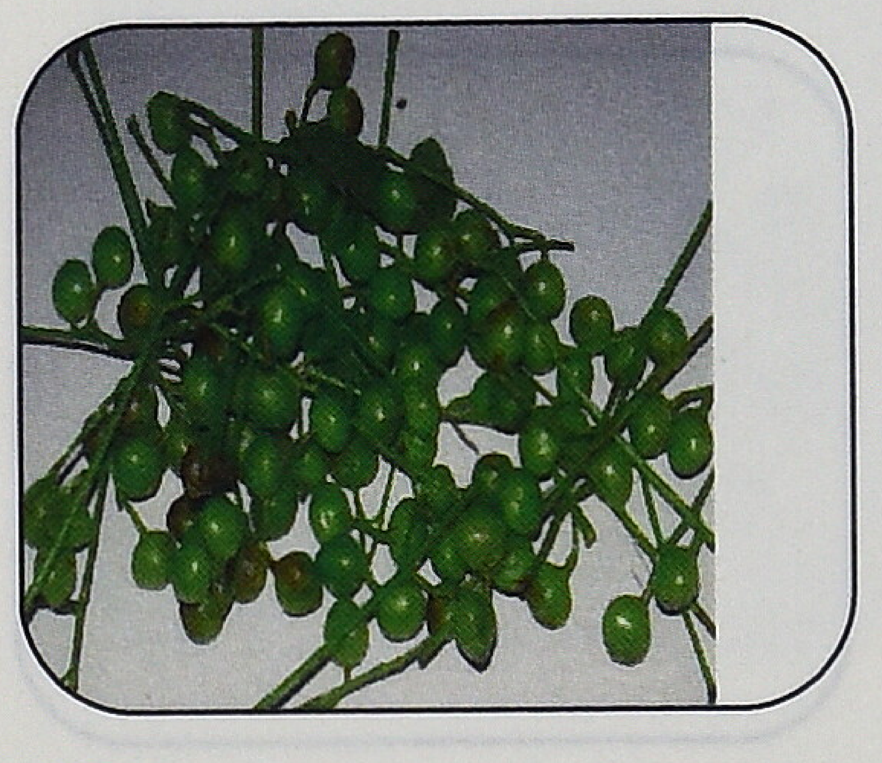
Bombox ceiba

Wt/ Seed	:	0.071g
Oil % with		
Respect to seed	:	18.64
Endosperm	:	26.46
Colour of oil	:	Brownish yellow



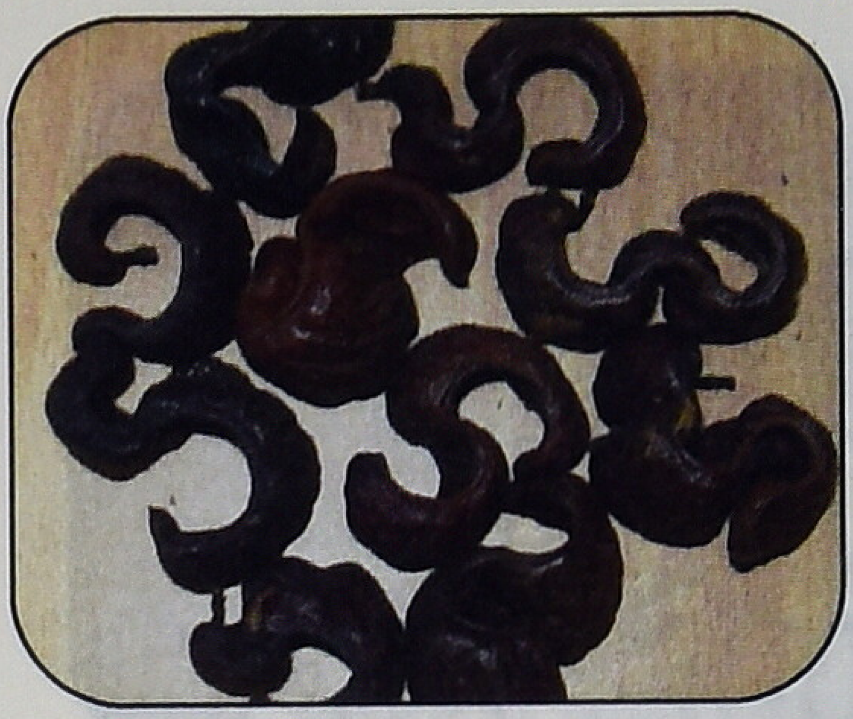
Bridelia retusa

Wt/ Seed	:	0.0939g
Oil % with		
Respect to seed	:	6.08
Endosperm	:	11.7
Colour of oil	:	Greenish yellow



Bursera delpechiana

Wt/ Seed	:	0.0664g
Oil % with		
Respect to seed	:	5.94
Endosperm	:	1.199
Colour of oil	:	Greenish



Caesalpinia coriaria

Wt/ Seed	:	1.3058g
Oil % with Respect to seed	:	3.6
Colour of oil	:	Greenish yellow

Caesalpinia pulcherrima

Wt/ Seed	:	0.1492g
Oil % with Respect to seed	:	4.77
Colour of oil	:	Reddish yellow

Caesalpinia sappan

Wt/ Seed	:	0.660g
Oil % with Respect to seed	:	14.32
Endosperm	:	20.55
Colour of oil	:	Brown

Calophyllum inophyllum

Wt/ Seed	:	3.465g
Oil % with Respect to seed	:	33.77
Endosperm	:	54.13
Colour of oil	:	Greenish Brown

Canarium strictum

Wt/ Seed	:	8.3044g
Oil % with Respect to seed	:	9.43
Colour of oil	:	Blackish brown

Cassia fistula

Wt/ Seed	:	0.3299g
Oil % with Respect to seed	:	10.3
Colour of oil	:	Dark red

Cassia siamea

Wt/ Seed	:	0.0255g
Oil % with Respect to seed	:	8.7
Colour of oil	:	Greenish yellow

Ceiba pentandra

Wt/ Seed	:	0.0589g
Oil % with Respect to seed	:	24.64
Colour of oil	:	Yellow

Dalbergia latifolia

Wt/ Seed	:	0.1065g
Oil % with Respect to seed	:	3.5
Colour of oil	:	Pale green

Delonix regia

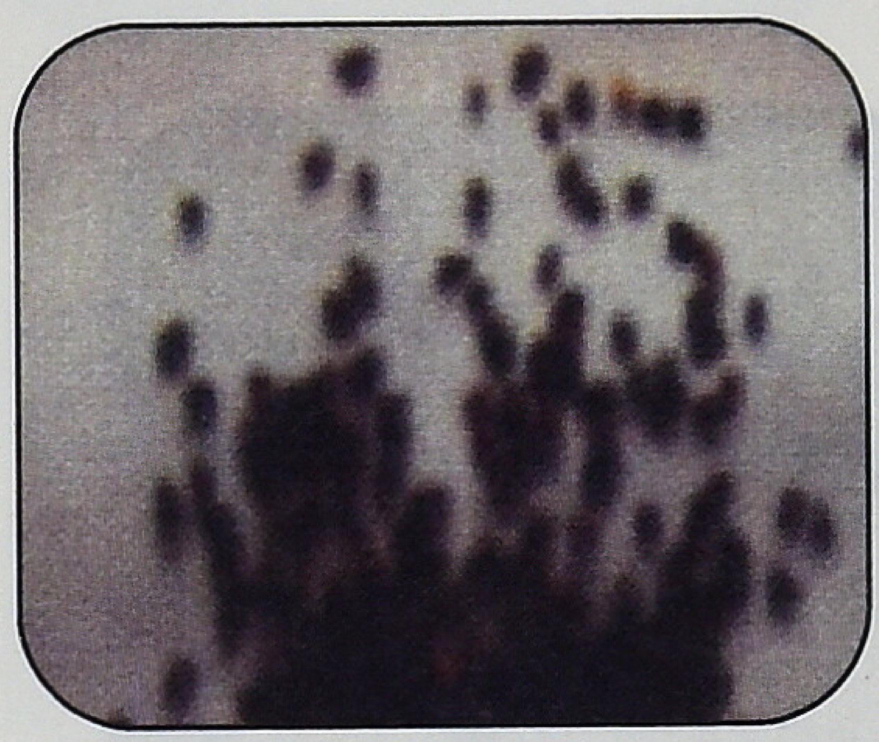
Wt/ Seed	:	0.4418g
Oil % with Respect to seed	:	6.81
Colour of oil	:	Brown

Derris indica

Wt/ Seed	:	3.316g
Oil % with		
Respect to seed	:	17.2
Endosperm	:	30.2
Colour of oil	:	Yellow

Embilica officinalis

Wt/ Seed	:	1.340g
Oil % with		
Respect to seed	:	0.18
Endosperm	:	13.6
Colour of oil	:	Yellow



Eucalyptus citriodora

Wt/ Seed	:	0.00694g
Oil % with		
Respect to seed	:	16.8
Colour of oil	:	Greenish yellow

Eucalyptus tereticornis

Wt/ Seed	:	0.000496g
Oil % with		
Respect to seed	:	19.4
Colour of oil	:	Brown

Hardwickia binata

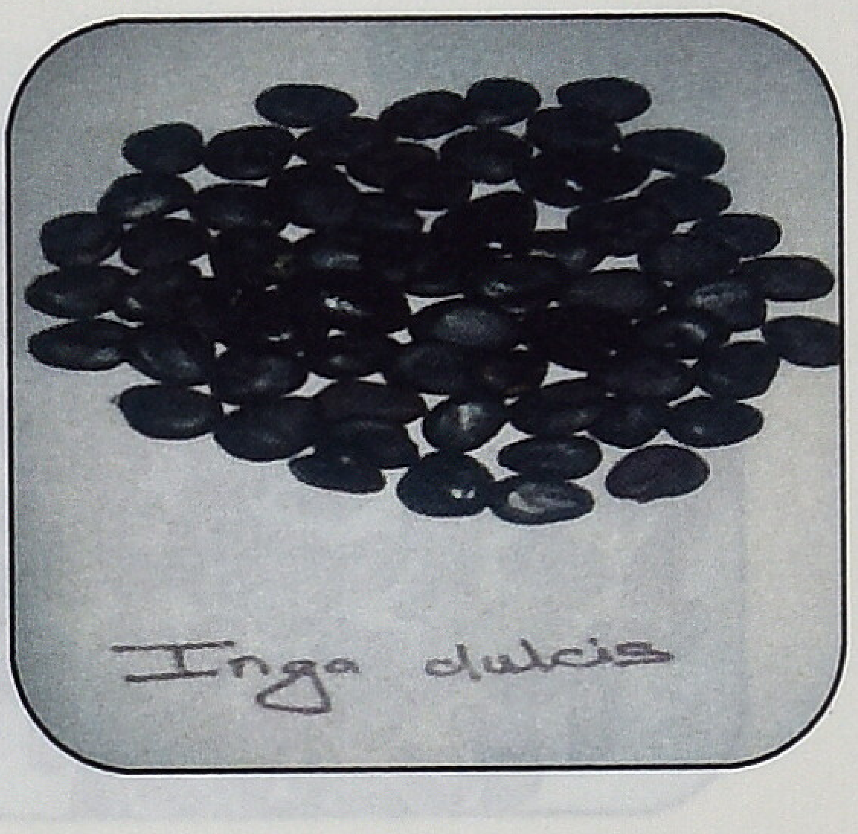
Wt/ Seed	:	0.4281g
Oil % with		
Respect to seed	:	9.81
Endosperm	:	18.59
Colour of oil	:	Dark green

Holoptelea integrifolia

Wt/ Seed : 0.0345g
Oil % with
Respect to seed : 12.33
Colour of oil : Yellow

Hopea wightiana

Wt/ Seed : 16.679g
Oil % with
Respect to seed : 2.82
Endosperm : 19.59
Colour of oil : Greenish yellow



Inga dulcis

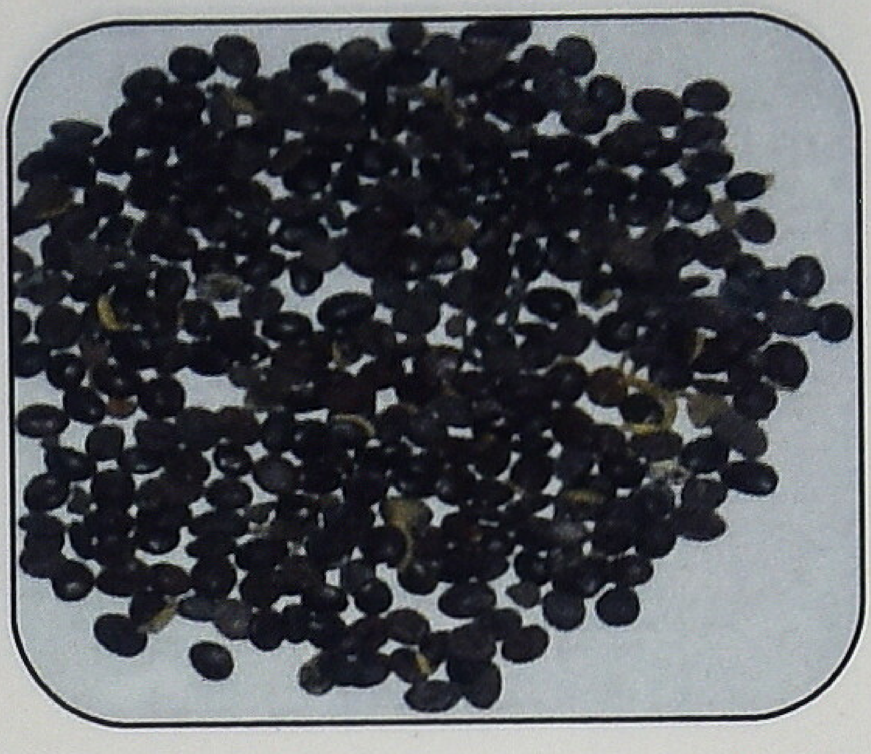
Wt/ Seed : 1.8565g
Oil % with
Respect to seed : 16.0976
Colour of oil : Greenish yellow

Jacaranda mimosofolia

Wt/ Seed : 11.060g
Oil % with
Respect to seed : 2.74
Endosperm : 37.7
Colour of oil : Slight green

Jatropha curcas

Wt/ Seed : 0.667g
Oil % with
Respect to seed : 36.94
Endosperm : 57.57
Colour of oil : Yellow



Kaya anthothica

Wt/ Seed	:	0.029g
Oil % with		
Respect to seed	:	10.05
Colour of oil	:	yellow

Kaya nayasica

Wt/ Seed	:	0.3835g
Oil % with		
Respect to seed	:	51.36
Colour of oil	:	Golden yellow

Leucaena leucocephala

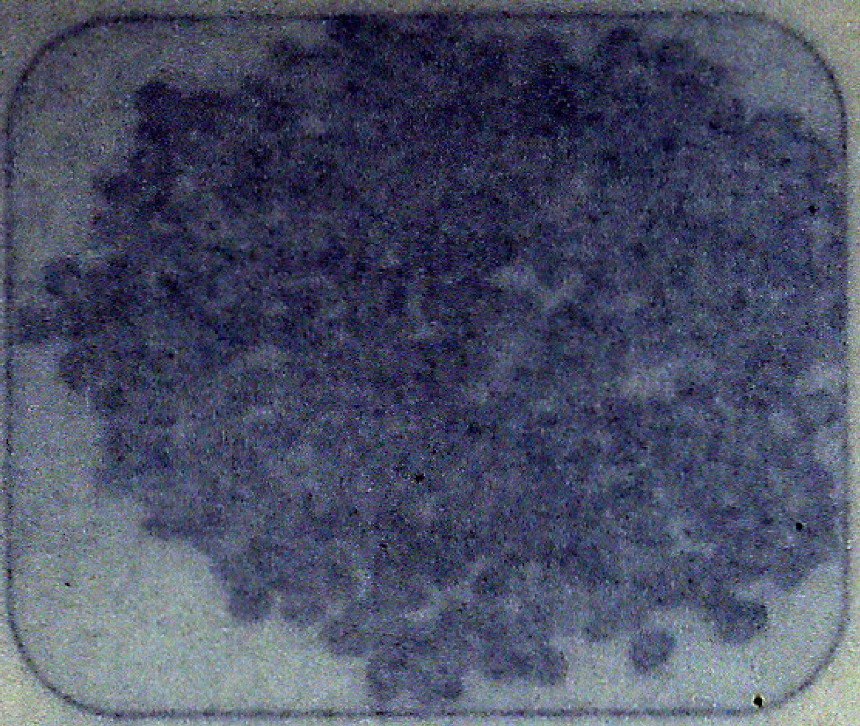
Wt/ Seed	:	0.05833g
Oil % with		
Respect to seed	:	6.67
Colour of oil	:	Greenish Yellow

Vilvam

Wt/ Seed	:	0.081g
Oil % with		
Respect to seed	:	26.55
Endosperm	:	36.36
Colour of oil	:	Greenish yellow

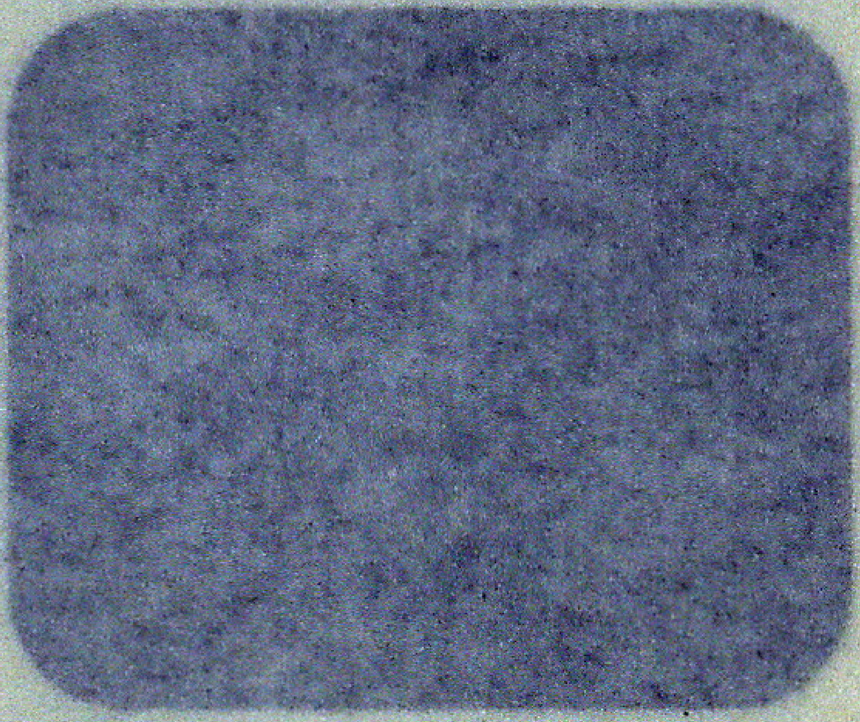
Mallotus philippensis

Wt/ Seed	:	0.0937g
Oil % with		
Respect to seed	:	5.89
Endosperm	:	12.96
Colour of oil	:	Greenish yellow



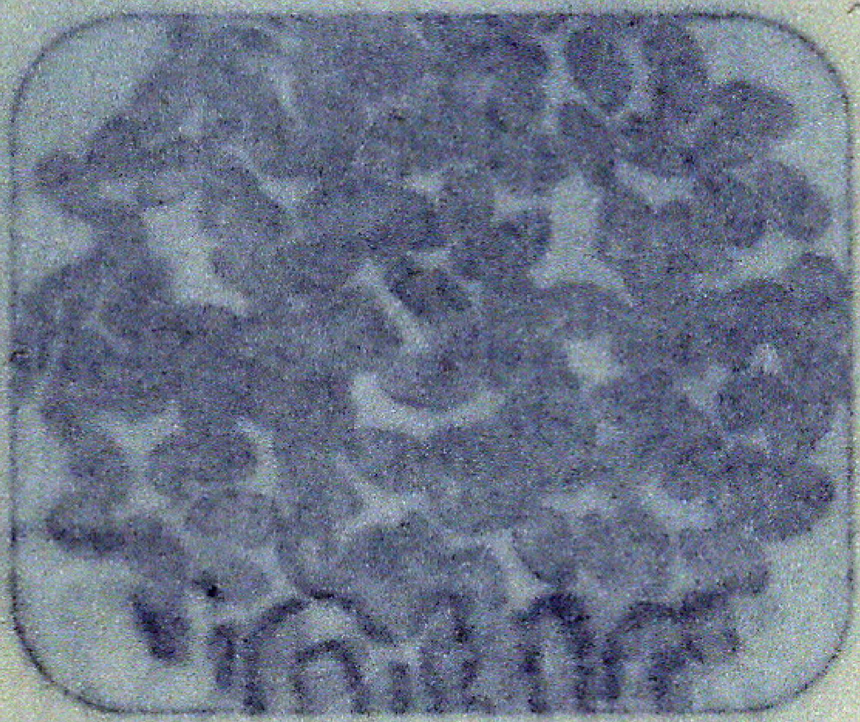
Kaya anthothica

Wt/ Seed	:	0.029g
Oil % with Respect to seed	:	10.05
Colour of oil	:	yellow



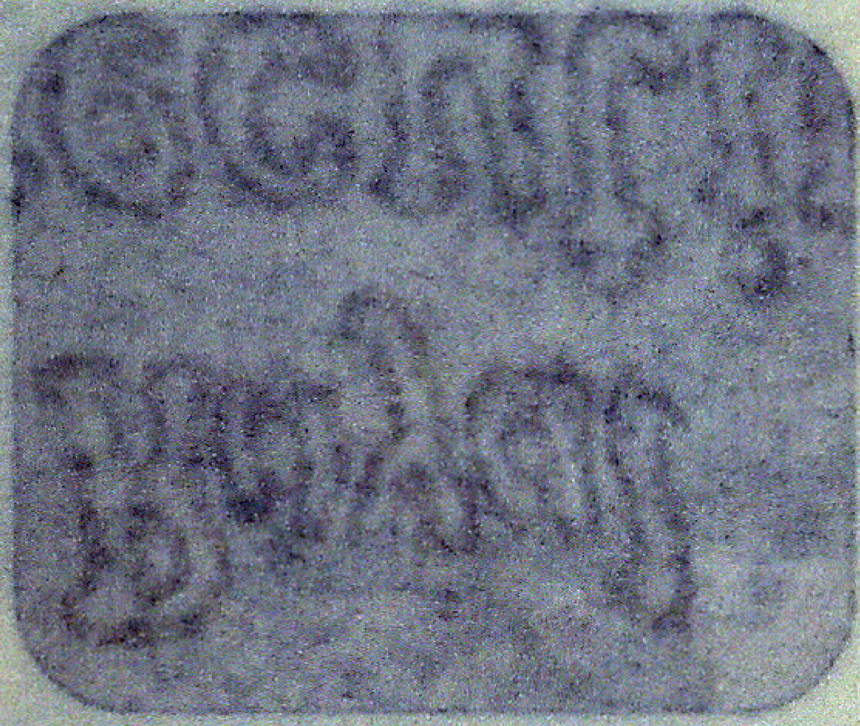
Kaya nayasica

Wt/ Seed	:	0.3835g
Oil % with Respect to seed	:	51.36
Colour of oil	:	Golden yellow



Leucaena leucocephala

Wt/ Seed	:	0.05833g
Oil % with Respect to seed	:	6.67
Colour of oil	:	Greenish Yellow



Vilvam

Wt/ Seed	:	0.081g
Oil % with Respect to seed	:	26.55
Endosperm	:	36.36
Colour of oil	:	Greenish yellow

Mallotus philippensis

Wt/ Seed	:	0.0937g
Oil % with Respect to seed	:	5.89
Endosperm	:	12.96
Colour of oil	:	Greenish yellow

Mangifera indica

Wt/ Seed	:	16.749g
Oil % with		
Respect to seed	:	4.46
Endosperm	:	8.96
Colour of oil	:	Brownish Yellow

Manilkara achras

Wt/ Seed	:	0.6289g
Oil % with		
Respect to seed	:	4.503
Endosperm	:	7.983
Colour of oil	:	Pale Yellow

Melia azadirachta

Wt/ Seed	:	0.521g
Oil % with		
Respect to seed	:	3.8
Endosperm	:	42.07
Colour of oil	:	Yellow

Melia dubia

Wt/ Seed	:	4.126g
Oil % with		
Respect to seed	:	9.15
Colour of oil	:	Brown

Moringa oleifera

Wt/ Seed	:	0.308g
Oil % with		
Respect to seed	:	21.83
Endosperm	:	30.14
Colour of oil	:	Pale Yellow

Mimusops elengi

Wt/ Seed	:	0.704g
Oil % with		
Respect to seed	:	14.57
Endosperm	:	39.15
Colour of oil	:	Pale Yellow

Murrya koengii

Wt/ Seed	:	0.2195g
Oil % with		
Respect to seed	:	1.397
Endosperm	:	4.605
Colour of oil	:	Dark brown

Myristica fragrans

Wt/ Seed	:	4.866g
Oil % with		
Respect to seed	:	23.60
Colour of oil	:	Pale yellow

Oxytenandra nigrocilia

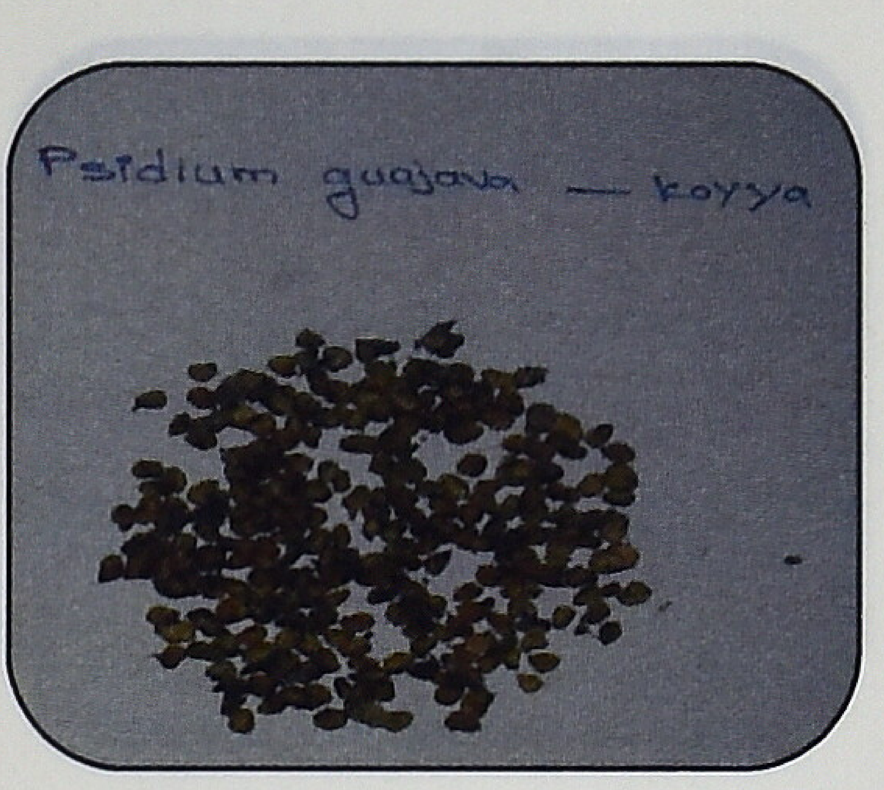
Wt/ Seed	:	0.0639g
Oil % with		
Respect to seed	:	1.022
Endosperm	:	1.585
Colour of oil	:	Pale yellow

Peltophorum ferrugineum

Wt/ Seed	:	0.5616g
Oil % with		
Respect to seed	:	1.0
Endosperm	:	5.33
Colour of oil	:	Brown

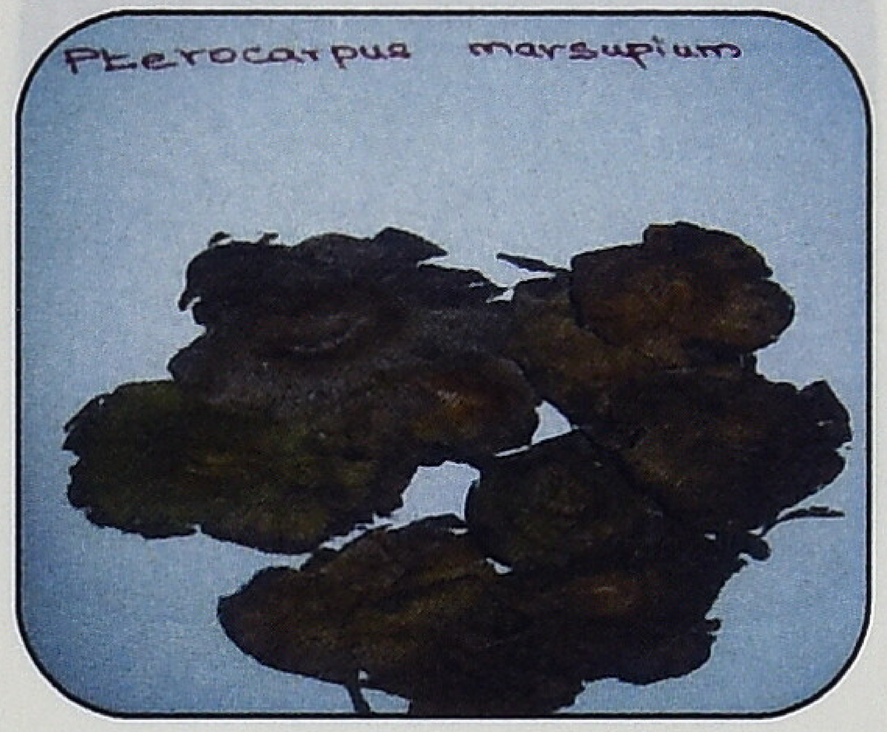
Polyalthia longifolia

Wt/ Seed	:	1.1072g
Oil % with		
Respect to seed	:	9.33
Endosperm	:	14.98
Colour of oil	:	Brown



Psydium guajava

Wt/ Seed	:	0.0116g
Oil % with		
Respect to seed	:	6.186
Colour of oil	:	Brown



Pterocarpus marsupium

Wt/ Seed	:	0.6224g
Oil % with		
Respect to seed	:	2.949
Colour of oil	:	Brownish yellow

Pterocarpus santalinus

Wt/ Seed	:	0.9093g
Oil % with		
Respect to seed	:	0.987
Colour of oil	:	Light brown

Samanea saman

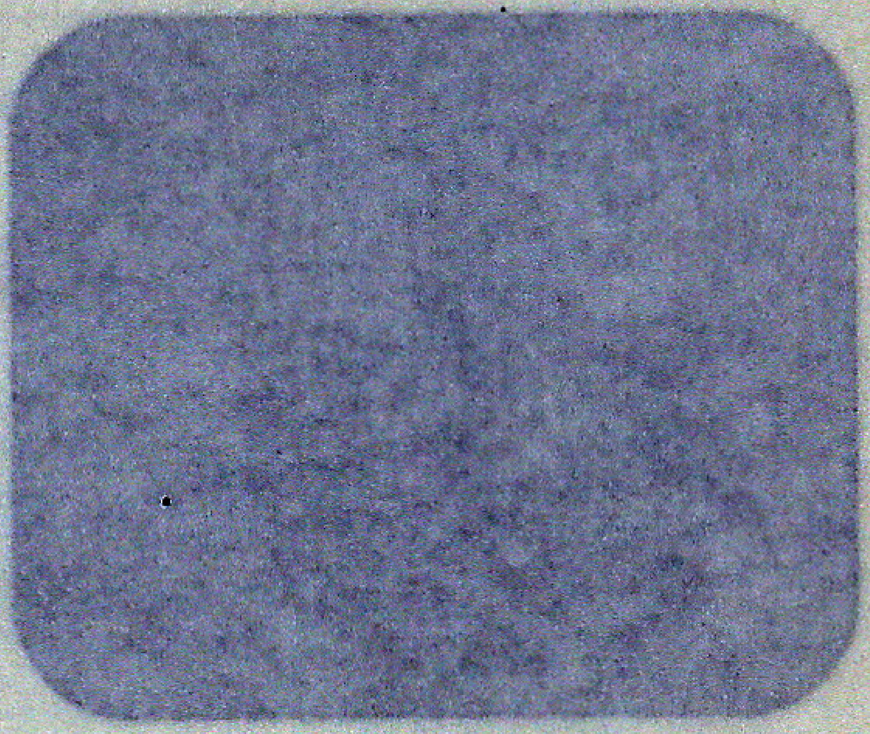
Wt/ Seed	:	8.6906g
Oil % with		
Respect to seed	:	0.95
Endosperm	:	6.64
Colour of oil	:	Green

Polyalthia longifolia

Wt/ Seed	:	1.1072g
Oil % with Respect to seed	:	9.33
Endosperm	:	14.98
Colour of oil	:	Brown

Psydium guajava

Wt/Seed	:	0.0116g
Oil % with Respect to seed	:	6.186
Colour of oil	:	Brown



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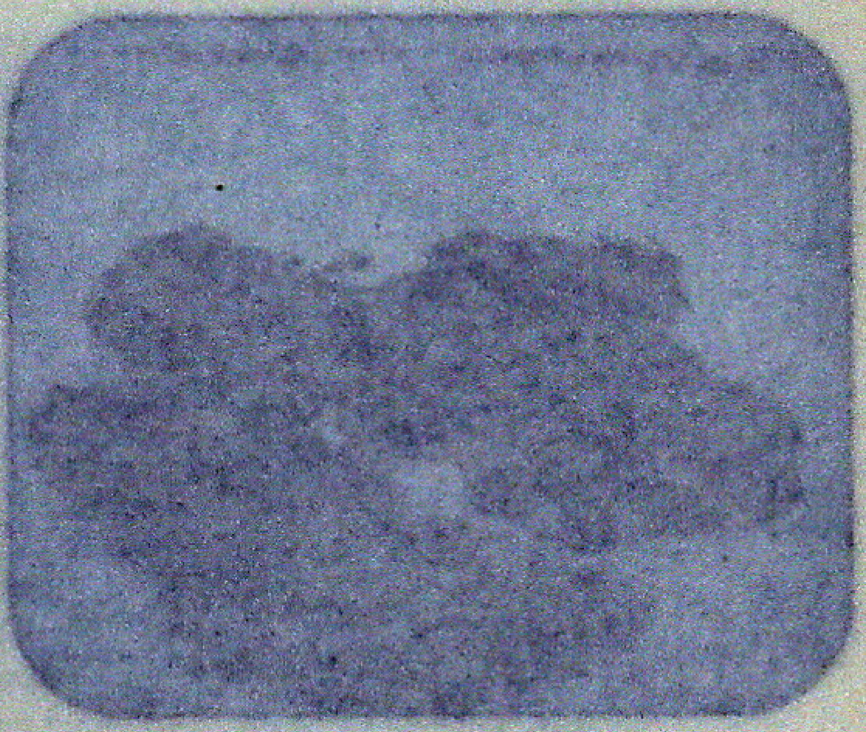
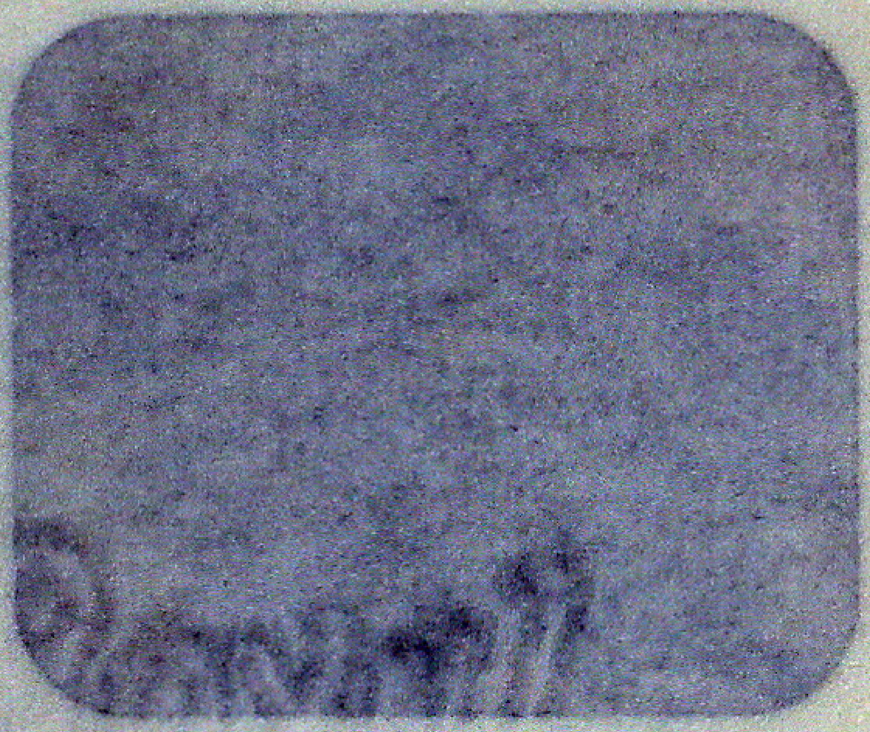
Oil % with Respect to seed	:	2.949
Colour of oil	:	Brownish yellow



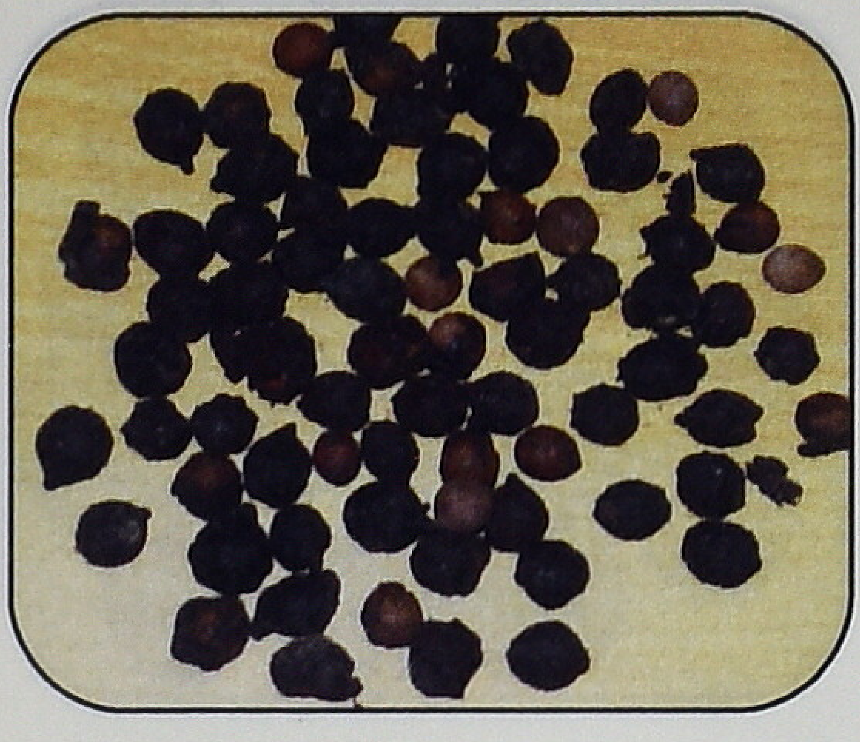
Pterocarpus santalinus

Wt/ Seed	:	0.9093g
Oil % with Respect to seed	:	0.987
Colour of oil	:	Light brown



Samanea saman

Wt/ Seed	:	8.6906g
Oil % with Respect to seed	:	0.95
Endosperm	:	6.64
Colour of oil	:	Green



Santalum album

Wt/ Seed	:	0.226g
Oil % with Respect to seed	:	26.6
Endosperm	:	64.8
Colour of oil	:	Greenish yellow

Sapindus emarginatus

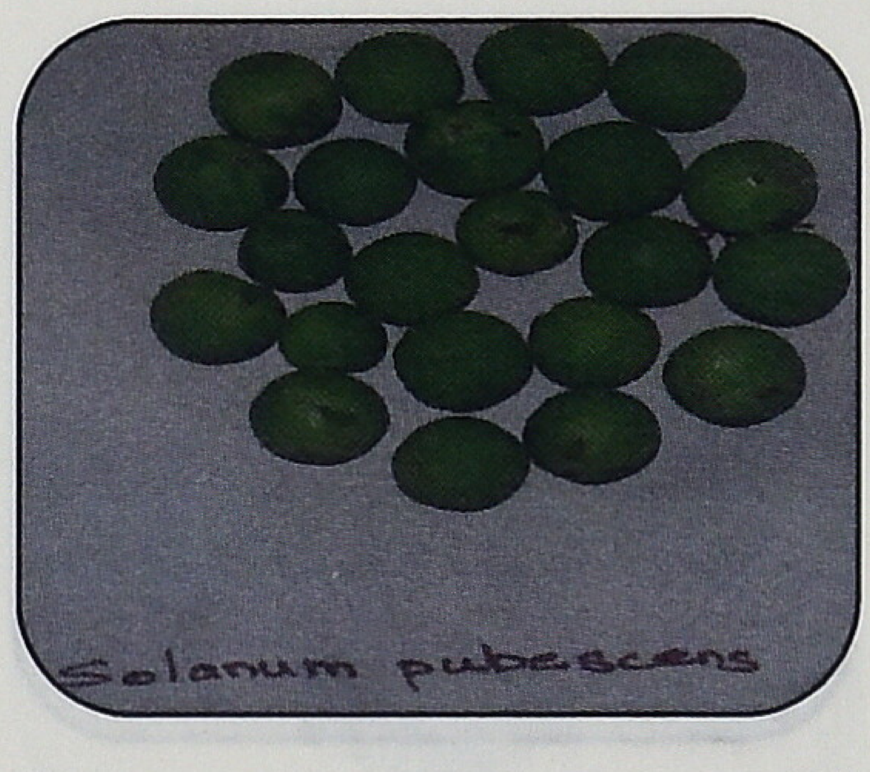
Wt/ Seed	:	0.889g
Oil % with Respect to seed	:	27.619
Colour of oil	:	Light Green

Sapindus laurifolius

Wt/ Seed	:	1.8596g
Oil % with Respect to seed	:	13.525
Colour of oil	:	Light Green

Simarouba glauca

Wt/ Seed	:	0.954g
Oil % with Respect to seed	:	29.31
Endosperm	:	63.42
Colour of oil	:	Greenish yellow



Solanum pubescens

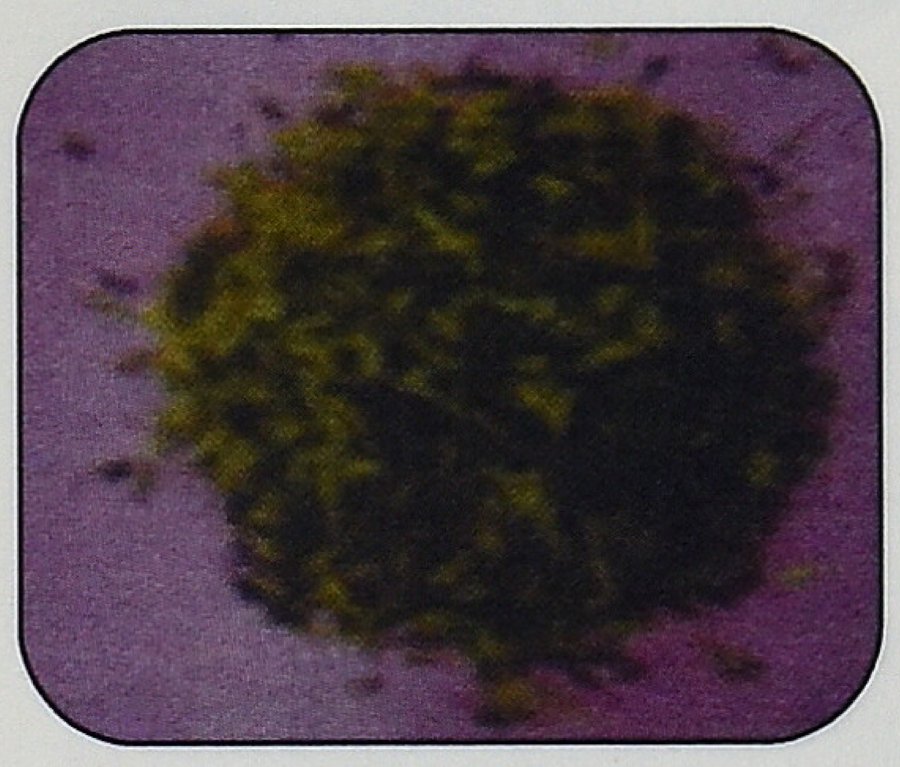
Wt/ Seed	:	g
Oil % with Respect to seed	:	
Endosperm	:	
Colour of oil	:	

Strychnos nuxvomica

Wt/ Seed	:	1.7215g
Oil % with Respect to seed	:	3.84
Colour of oil	:	Pale yellow

Syzygium aromaticum

Wt/ Seed	:	0.0985g
Oil % with Respect to seed	:	20.22
Colour of oil	:	Blackish green



Strylosanthus hamata

Wt/ Seed	:	0.003238g
Oil % with Respect to seed	:	7.4
Colour of oil	:	Greenish yellow

Tamarindus indica

Wt/ Seed	:	0.8237g
Oil % with Respect to seed	:	5.7
Colour of oil	:	Brown

Tectona grandis

Wt/ Seed	:	0.7511g
Oil % with Respect to seed	:	13.1
Colour of oil	:	Red colour

Terminalia arjuna

Wt/ Seed	:	2.738g
Oil % with Respect to seed	:	0.851
Endosperm	:	33.01
Colour of oil	:	Golden yellow

Terminalia bellarica

Wt/ Seed	:	4.1793g
Oil % with Respect to seed	:	37.5
Endosperm	:	71
Colour of oil	:	Brown

Terminalia catappa

Wt/ Seed	:	8.275g
Oil % with Respect to seed	:	3.445
Endosperm	:	36.74
Colour of oil	:	Golden yellow

Terminalia Chebula

Wt/ Seed	:	5.0919g
Oil % with Respect to seed	:	3.08
Endosperm	:	11.97
Colour of oil	:	Green

Thespesia populnea

Wt/ Seed	:	4.2706g
Oil % with Respect to seed	:	14.01
Endosperm	:	22.03
Colour of oil	:	Brown

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Zizyphus jujuba

Wt/ Seed	:	0.8961g
Oil % with		
Respect to seed	:	4.29
Endosperm	:	6.62
Colour of oil	:	Golden yellow

Wrightia tinctoria

Wt/ Seed	:	0.02676g
Oil % with		
Respect to seed	:	30.04
Colour of oil	:	Dark Red

Ziziphus horrida

Wt/ Seed	:	0.07612g
Oil % with		
Respect to seed	:	7.66
Colour of oil	:	Light green

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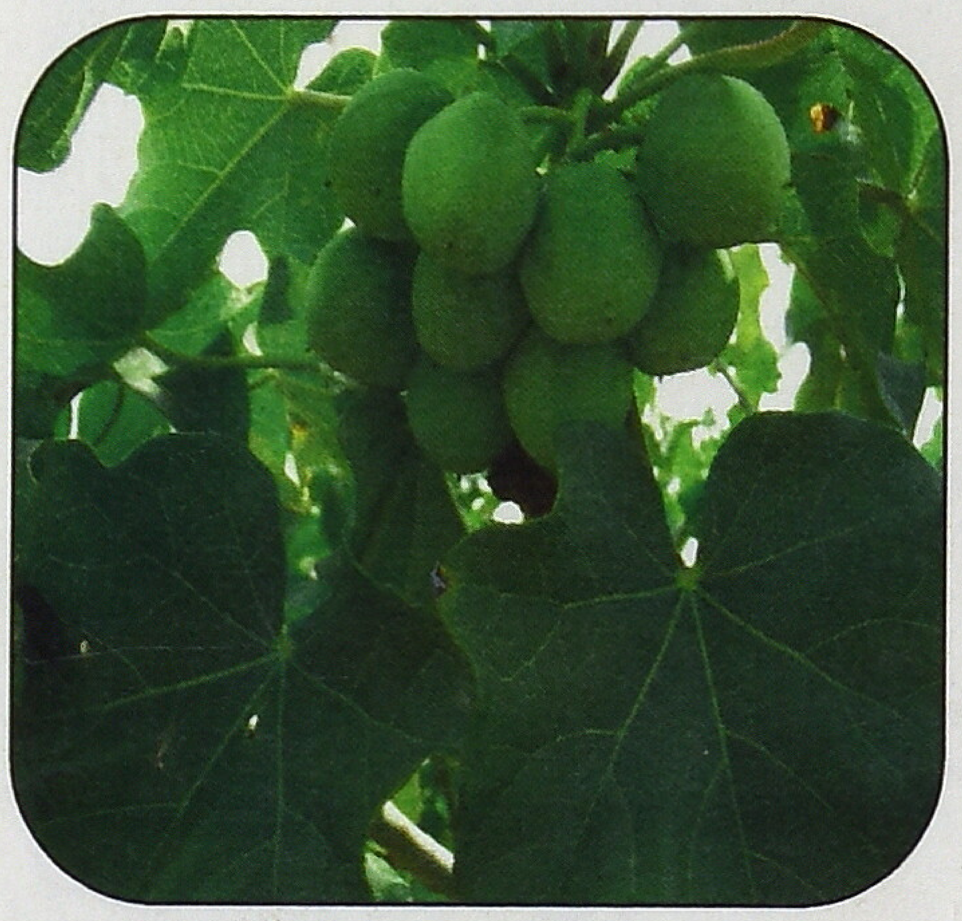
Royal
Executive
Bond

SOXRAP-OIL EXTRACTION

JATROPHACURCAS



SOXHLET-OIL EXTRACTION